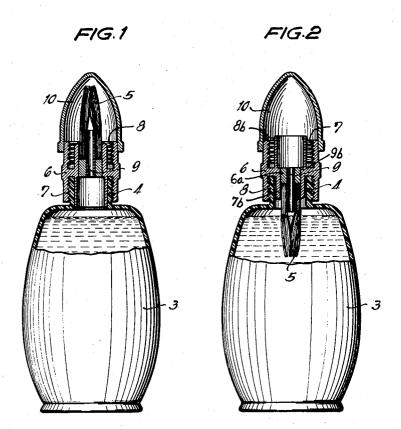
DEVICE FOR APPLYING LIQUID ADHESIVE OR THE LIKE Filed May 1, 1956



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DEVICE FOR APPLYING LIQUID ADHESIVE OR THE LIKE

Fritz Ernst Breuhan, Hannover, Germany Application May 1, 1956, Serial No. 581,964 2 Claims. (Cl. 15-136)

The invention relates to devices for applying liquid 15 adhesive, paint or the like, which devices comprise a container with flexible wall and a brush with liquid feed provided by a nozzle. When such devices are left unused for a considerable period, it may happen that the adhesive present on and between the bristles or hairs of the brush 20 will dry out and harden. The brush must then be softened up before reuse.

It is the object of the invention to avoid the above-mentioned drawback.

According to the invention, the brush in devices of the 25 is closed off from the outside by a closure 10. kind described is reversible, so that its bristles may be housed in the interior of the container when not in use. In the interior of the container, even when but little adhesive remains, gaseous glue solvents such as acetone are present. These keep the brush moist, or soften it if 30 hardened by dried adhesive. In the novel device, therefore, the brush is always ready for use.

The container may for example comprise a bottle of flexible synthetic material such as polyethylene. Adhesive is expelled by pressing the bottle. Upon release of pressure on the bottle, it returns to its original shape. This exerts suction on the adhesive present in the exit opening, so that exit of adhesive ceases instantaneously, and drip is reliably avoided. Such a bottle is especially suited for minor operations in which prolonged periods intervene between occasions when the adhesive applicator is used.

According to one embodiment of the invention, the brush is mounted in a screw cap which may be screwed on a threaded connection at the mouth of the container either with the brush protruding or with the brush pointing into the interior of the container as desired. Complete exclusion of air from the brush when not in use can be achieved with a plastic cover to be placed on that end of the screw cap which is outermost.

The device according to the invention will now be more fully described with reference to the accompanying drawings, but it should be understood that these are given by way of illustration and not of limitation and that many changes in the details may be made without departing from the spirit of the invention.

In the drawing:

Fig. 1 shows an embodiment of the device with the brush in normal position;

Fig. 2 shows the same embodiment with the brush inverted for softening.

Referring now to Fig. 1, the adhesive container comprises an elastic bottle 3 of synthetic material, having an externally threaded neck 4, smooth on its internal surface. The brush 5 is mounted in a threaded brush holder 6 by means of shank 6a which is secured to lip 7b. Female threads 7 and 8 at both ends of the holder, respectively, make it possible to attach it reversibly to the neck 4 of

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elastic bottle 3 forming the container, so that each of these ends, respectively, when screwed onto neck 4, cooperates with neck 4 in the manner described below.

The brush holder is provided with a flange 9b, to which are secured the aforementioned lip 7b and extending in an opposite direction, lip 8b. The diameter of the nozzlelike passage 9 in the shank 6a is adapted to the viscosity of the adhesive or other liquid.

Lip 8b has an outside diameter so dimensioned that the 10 exterior surface of the lip slidably contacts the entire surface of neck 4. Thus, when lip portion 8b is inserted into the neck 4, it "shears" off and pushes down the liquid adhesive which may have been clinging to the interior of neck 4.

Cylindrical lip portion 7b is of a smaller outside diameter than cylindrical portion 8b, so that it is spaced from the inner surface of neck 4. Cylindrical lip portion 7b thus easily enters neck 4. A space is formed between the lip portion 7b and neck 4, thus preventing solidification of the liquid adhesive between lip portion 7b and inner surface of neck 4.

In Fig. 2, the bristles of the brush 5 are in the interior of the bottle. The screw cap 6 is screwed to the threaded neck 4 of the container by its thread 8. The brush holder

When the device is to be used, the closure 10 is removed. Ordinarily the brush holder 6 will be in the position of Fig. 1; it is then screwed to the neck of the container by its thread 7. By pressing the body of the bottle, a larger or smaller quantity of adhesive may be fed to the brush 5 through passage 9 and then applied.

What I claim is: 1. Device for applying liquid adhesive, comprising in combination, a container for said liquid adhesive formed of a flexible, resilient material, said container having a closed flat bottom portion and an externally threaded, internally smooth, upper open neck portion; an internally threaded hollow brush holder capable of engaging with said externally threaded neck portion, an inner transversely extending flange integrally formed with said hollow brush holder, and arranged substantially centrally thereof, a first cylindrical lip portion extending axially towards one end of said brush holder and capable of close fitting engagement with said interior smooth portion, for sealing contact therewith, and to remove liquid residue therefrom, a second cylindrical lip portion extending axially from said flange towards the other end of said brush holder, said second cylindrical lip portion having a smaller outside diameter than said first cylindrical portion, and being spaced from said neck portion for easy entry thereinto and to avoid solidification of the liquid adhesive, a brush shank engaging interiorly with said second lip portion and extending partly into said second cylindrical lip portion, said shank being provided with a passage for permitting the flow of adhesive therethrough, and a brush secured to said shank and said second lip

2. The device according to claim 1, and in combination therewith a closure member capable of fitting engagement with the exterior of said brush holder.

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